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**Do electrons violate symmetry? A search for the electron's P- and T-violating permanent electric dipole moment<sup>1</sup>**

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We are probing TeV-scale physics with a unique tabletop experiment which combines precision measurement, a fairly unusual ion trap, and over a dozen lasers to both measure the electron's electric dipole moment and constrain potential dark matter candidates. In this talk I will introduce the essence of our measurement as well as our methods for constraining Beyond Standard Model physics [1]. [1] The JILA eEDM Experiment, In preparation, Tanya S. Roussy, Luke Caldwell, Trevor Wright, Kia Boon Ng, Noah Schlossberger, Sun Yool, Anzhou Wang, Gustavo Santanella, Antonio Vigil, Jun Ye and Eric Cornell

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